



United States  
Department of  
Agriculture

**Forest  
Service**

August 2006



# Meeting the Challenge

*Providing Ecosystem Services for our Communities*



Siuslaw National Forest



# The Natural Resources We Manage

## *The Siuslaw National Forest is characterized by*

- Temperate rain forest
- Highly productive soils
- Abundant winter rainfall with summer droughts
- A long growing season
- Thousands of miles of low-gradient perennial streams
- Steep unstable hillslopes
- Anadromous fish
- Communities nestled in narrow river valleys
- The Pacific Ocean, sand dunes and estuaries

## *Our niches*

- Create healthy forest habitat
- Provide coastal recreational experiences
- Nurture partnerships leading to whole watershed restoration
- Restore streams, wetlands and aquatic species

## Message from Forest Supervisor



*M*anaging for healthy ecosystems is a responsibility Siuslaw National Forest employees and our partners take seriously. Only by working together to restore whole watersheds can we provide the ecosystem services we have all come to expect. Ecosystem services are those benefits each of us derives from healthy, functioning landscapes. They include climate control, air and water purification, raw materials, foods and medicines and recreational opportunities.

This pamphlet documents areas in and adjacent to the Siuslaw National Forest where we and our partners:

- have protected and completed restoration projects, establishing a trend toward watershed recovery,
- are currently implementing restoration projects, and
- are assessing needs and locations for future projects.

We've been pleased with our initial efforts, but much work remains to be done. We invite you to become involved in our endeavors.

José Linares  
Forest Supervisor



## The Situation



single-species  
even-aged  
plantations

poor  
development  
of forest  
ground  
vegetation



fragmented forest landscapes

## The Challenge



contiguous blocks of  
complex mature forest



a variety of species  
and age classes



socially & economically  
healthy communities

sustainable harvest levels

## Techniques

- Replant a variety of native species
- Thin plantations
- Create small openings in the canopy
- Create fire breaks
- Create snags and down wood



# ROAD MANAGEMENT

objectives

## The Situation

poorly designed culverts  
blocking flow and fish and  
amphibian passage



poor road  
drainage



outdated road construction techniques  
sidecast and fillslope failures

## The Challenge

well-designed  
stream crossings



minimal sediment



appropriate road drainage  
a stable road system

adequately sized road  
system for forest use



## Techniques

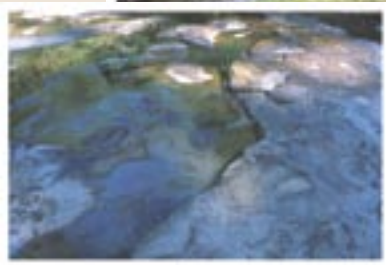
- Install cross drains
- Pull back sidecast material
- Stabilize cutslopes and fills
- Stabilize and close roads not being used
- Rock or pave roads

## STREAMS

## The Situation

simple, straightened  
downcut channels

high water  
temperatures



bedrock-dominated stream channels

## The Challenge



dynamic stream systems

complex channel structure

abundant aquatic species



spawning & rearing habitat

low water temperatures

## Techniques

- Add large wood and boulders
- Construct sinuous stream channels
- Seed and capture gravels
- Connect side channels





# RIPARIAN & FLOODPLAINS objectives

## The Situation

eroding streambanks



loss of wetlands

loss of  
riparian forests  
to pastures



lowered groundwater table  
poor stream shading

## The Challenge

riparian forests with mixed  
conifer, hardwood and  
shrubs



tidal interaction with  
salt marshes

groundwater and  
wetland recovery



shade

streambank protection



## Techniques

- Fill drainage ditches
- Remove tide gates and dikes
- Stabilize streambanks with bioengineering techniques
- Plant native species to restore complexity
- Fence out livestock
- Thin hardwoods surrounding conifers

## The Situation

European Beach Grass  
dominates plant communities



stabilized  
dunes



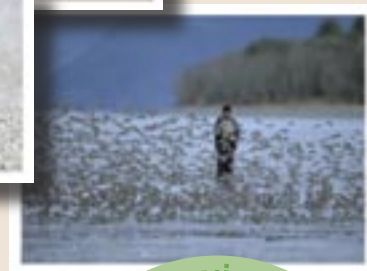
reduced area of open sand  
endangered plant & animal species

## The Challenge

active dune  
system



abundant  
native  
animals



abundant native plants

## Techniques

- Remove European Beach Grass
- Reshape foredune heights
- Manage predators and harassment of endangered species





# INVASIVE SPECIES

control

## The Situation

altered plant communities



introduced species



invasive aquatic plants

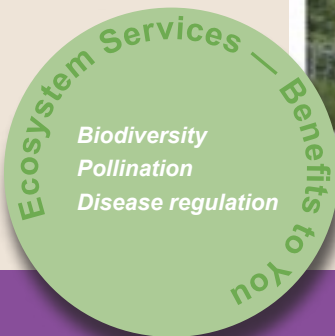


## The Challenge

native species occupying ecological niches



restored special and unique habitats

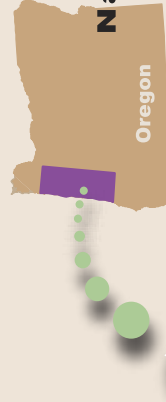


## Techniques

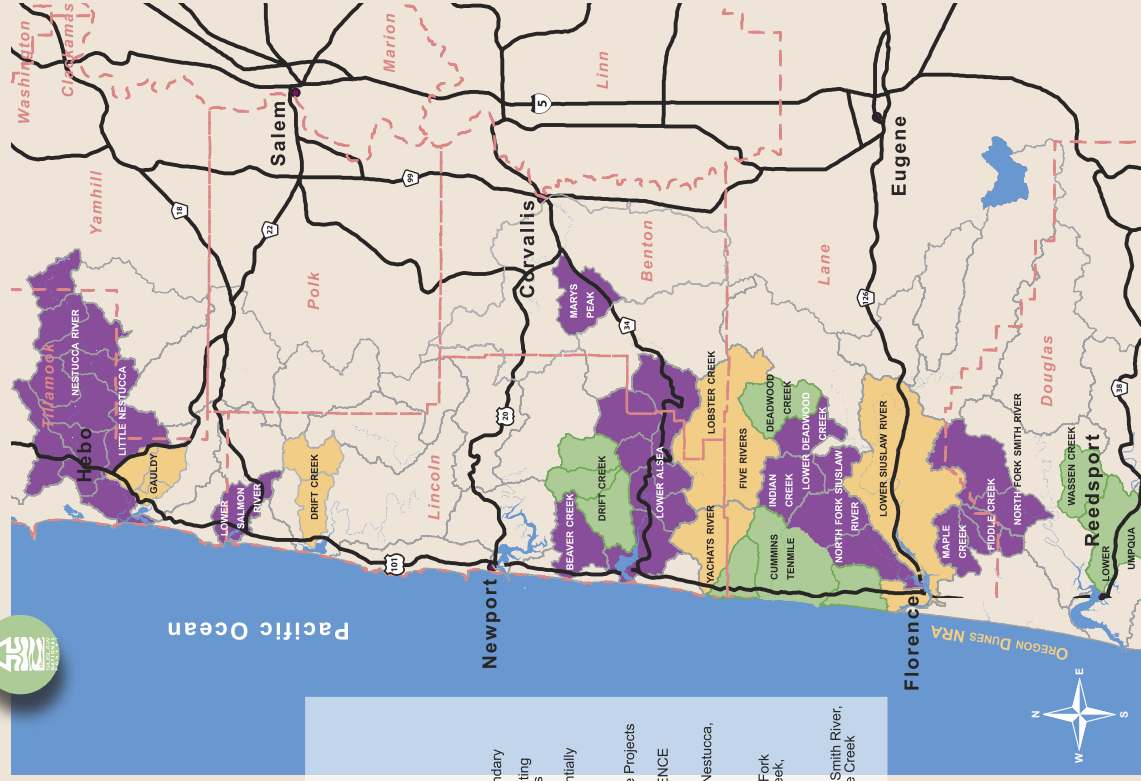
- Prescribed burns
- Hand pulling
- Herbicide application
- Remove plants from lakes
- Replant with natives
- Mechanical removal

# WATERSHED RESTORATION WORK

status of



on the  
**Siuslaw  
National Forest**



## Legend

- County Line
- Major Highways
- Watershed or Subwatershed Boundary
- Currently Implementing Restoration Projects
- Restoration Substantially Completed
- Assessing Needs & Locations for Future Projects

### PLANNING SEQUENCE

**Number One:**  
Lower Alsea, Little Nestucca, Salmon River

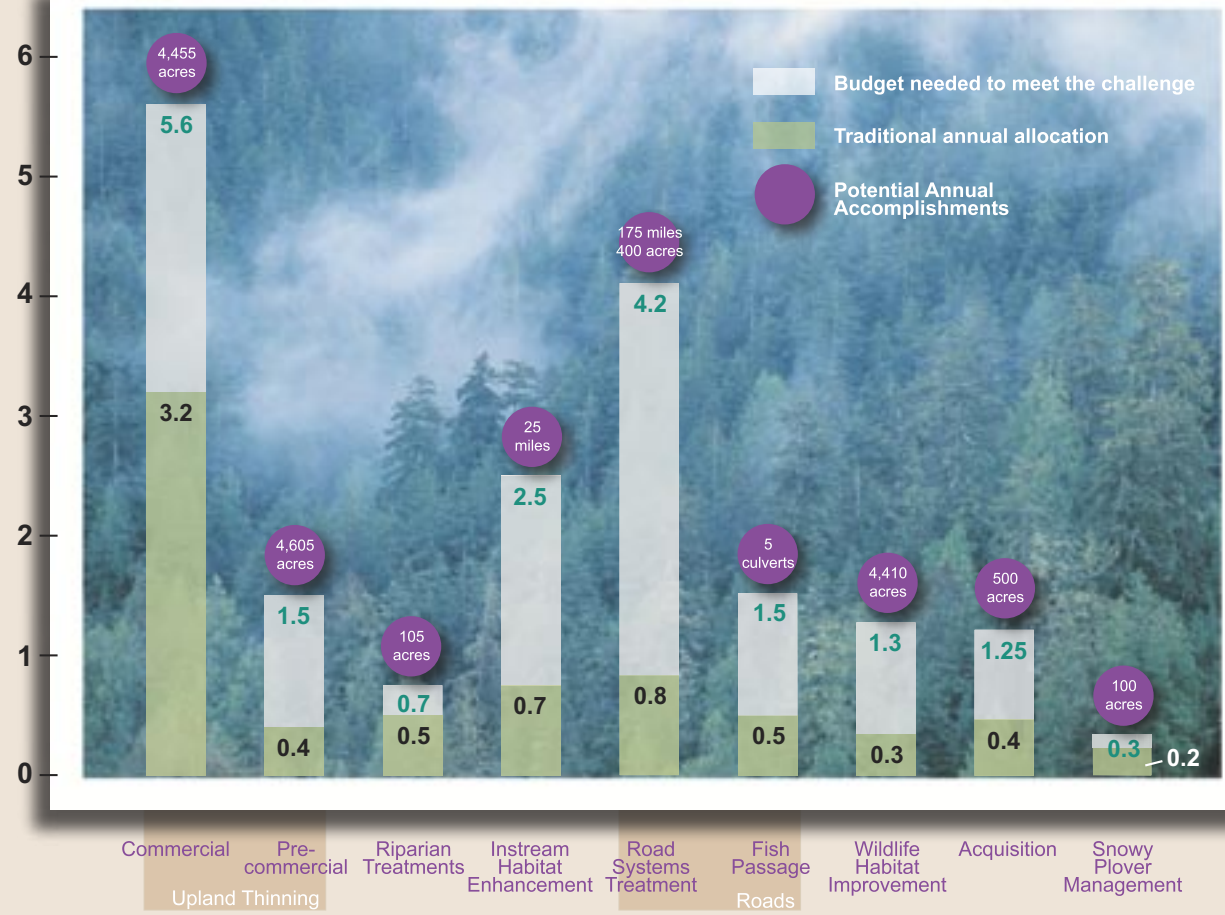
**Number Two:**  
Mays Peak, North Fork Siuslaw River, Lower Nestucca

**Number Three:**  
Beaver, North Fork Smith River, Fiddle Creek, Maple Creek

# FUNDING NEEDS

annual program

**Annual Budget**  
(Millions of Dollars)



**Restoration Project Types**

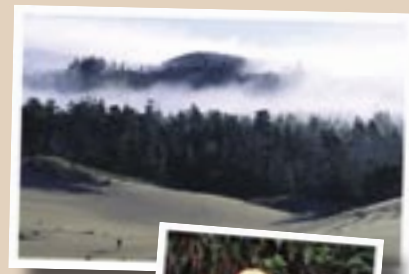
Budget needs include overhead, personnel & project costs.

# Siuslaw National Forest

4077 Research Way  
Corvallis, OR 97333  
(541) 750-7000

*For more information, visit our website at*

[www.fs.fed.us/r6/siuslaw/](http://www.fs.fed.us/r6/siuslaw/)



## Hebo Ranger District

31525 Hwy 22  
Hebo, OR 97122  
(503) 392-3161

## Central Coast Ranger District – Oregon Dunes National Recreation Area

### Waldport Office

1049 SW Pacific Hwy  
Waldport, OR 97394  
(541) 563-3211

### Florence Office

4480 Hwy 101, Building G  
Florence, OR 97439  
(541) 902-8526

### Reedsport Office

855 Hwy 101  
Reedsport, OR 97467  
(541) 271-3611



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